

### **REMARKS**

Applicants respectfully request further examination and reconsideration in view of the above amendments and the arguments set forth fully below. In the Office Action mailed April 9, 2007, Claims 1-3, 5-19 and 21-22 have been rejected. In response, the Applicants have submitted the following remarks and have amended claims 1, 13 and 16. Accordingly, Claims 1-3, 5-19, and 21-22 are still pending. Favorable reconsideration is respectfully requested in view of the amended claims and the remarks below.

#### **Examiner Interview**

On Wednesday, June 20, 2007, the undersigned, Examiner Clement Graham, and Supervisory Examiner Jay Kramer conducted a telephone interview. During the interview the application of the prior art references Conway and Nasburg to the independent claim 1 was discussed. While no specific agreement was reached regarding the allowability of the independent claim 1, the Examiners indicated that there may be aspects of the invention that are patentable over the prior art, and further suggested possible amendments to the independent claim 1. The amendments made above are made pursuant to the Examiners comments and suggestions. The Applicants gratefully acknowledge the Examiners time and attention during the telephone interview, and appreciate the same.

#### **Rejections Under 35 USC §103**

Claims 1-3, 5-9 and 21-22 have been rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,732,401 to Conway (hereinafter Conway), in view of U.S. Patent No. 5,801,943 to Nasburg (hereinafter Nasburg). The applicants respectfully disagree with this rejection.

As discussed in a previous Office Action response, Conway teaches a system for tracking costs of medical procedures by monitoring the movements of personnel, supplies and equipment and processing data on these movements to produce detailed and accurate cost accounting records associated with particular services rendered (Conway, abstract).

By the above amendments, the Applicants have amended the independent claims 1 and 16 to clarify the type of hospital data collected by the system and method of the present disclosure. Specifically, the system and method of the present disclosure collects a set of

hospital data that includes a set of hospital statistics, a set of hospital factual information in a set of hospital macro data. The Applicants respectfully submit that these amendments do not constitute new matter, as these claims draw full support from the specification, pages 4-5. Furthermore, the Applicants respectfully submit that neither the Conway or Nasburg reference teach such collection of hospital data, nor the remainder of the system and method as described and claimed in the present disclosure.

Within the Office Action, it is also stated that Conway fails to teach simulating the flow of patients through the hospital using the model wherein the simulating step utilizes the collected data and using the model and the result of the simulating steps to recommend hospital resources changes.

The Nasburg reference teaches a traffic surveillance and simulation apparatus. The system applies to large road networks, and employs smart sensors to identify plural individual vehicles in the network (Nasburg, abstract). While the Nasburg reference teaches the ability to predict kinematic behaviors of all vehicles in an interchange (Nasburg, column 8, lines 7-8), Nasburg does not teach utilizing a model based on collected data and hourly costs, and using the model and the results of the simulating steps to recommend hospital resources changes.

The independent claim 1 is directed toward a method of assessing patient flow through care units of a hospital using a computer having a microprocessor comprising: collecting a set of hospital data the set of hospital data including a set of hospital statistics, a set of hospital factual information and a set of hospital macro data, assigning an hourly cost to each care unit for each patient based upon the set of collected hospital data, building a model based upon the collected set of hospital data and the assigned hourly cost, simulating the flow of patients through the hospital using the model, wherein the simulating step utilizes the collected set of hospital data; and using the model and the results of the simulating step to recommend hospital resource changes. As described above, neither Conway, Nasburg nor their combination teach a collection module configured to accept a set of hospital data the set of hospital data including a set of hospital statistics, a set of hospital factual information and a set of hospital macro data; an assignment module configured to assign an hourly cost to

each unit for each patient based upon the set of collected hospital data; a model module configured to build a model of the flow of patients through the hospital, the model based upon the set of collected hospital data and the assigned hourly cost; a simulation module configured to simulate the flow of patients through the hospital, wherein the simulation module utilizes the set of hospital data; and a resource module configured to determine a resource utilization of the hospital by utilizing the model and the output of the simulation module. For at least these reasons, the independent claim 1 is allowable over the teachings of Conway, Nasburg and their combination.

Claims 2-3 and 5-15 are dependent upon the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Conway, Nasburg and their combination. Accordingly, Claims 2-3 and 5-15 are also allowable as being dependant upon an allowable base claim.

The independent claim 16 is directed to a computer system for modeling patient flow through care units of a hospital comprising: a collection module configured to accept a set of hospital data the set of hospital data including a set of hospital statistics, a set of hospital factual information and a set of hospital macro data; an assignment module configured to assign an hourly cost to each unit for each patient based upon the set of collected hospital data; a model module configured to build a model of the flow of patients through the hospital, the model based upon the set of collected hospital data and the assigned hourly cost; a simulation module configured to simulate the flow of patients through the hospital, wherein the simulation module utilizes the set of hospital data; and a resource module configured to determine a resource utilization of the hospital by utilizing the model and the output of the simulation module. As described above, neither Conway, Nasburg nor their combination teach a collection module configured to accept a set of hospital data the set of hospital data including a set of hospital statistics, a set of hospital factual information and a set of hospital macro data; an assignment module configured to assign an hourly cost to each unit for each patient based upon the set of collected hospital data; a model module configured to build a model of the flow of patients through the hospital, the model based upon the set of collected hospital data and the assigned hourly cost; a simulation module configured to simulate the

Application No. 09/821,774  
Amendment Dated June 25, 2007  
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flow of patients through the hospital, wherein the simulation module utilizes the set of hospital data; and a resource module configured to determine a resource utilization of the hospital by utilizing the model and the output of the simulation module. For at least these reasons, the independent claim 16 is allowable over the teachings of Conway, Nasburg and their combination.

Claims 17 -19 and 21-22 depend upon the independent Claim 16. As described above, the independent Claim 16 is allowable over the teachings of Conway, Nasburg and their combination. Accordingly, Claims 17-19 and 21-22 are also allowable as being dependent upon an allowable base claim.

For these reasons, Applicants respectfully submit that all of the claims are now in a condition for allowance, and allowance at an early date would be appreciated. **Should the Examiner have any questions or comments, they are encouraged to call the undersigned at 414-271-7590 to discuss the same so that any outstanding issues can be expeditiously resolved.**

Respectfully submitted,

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